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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,270	03/07/2006	Peter John Carter	03164.0181USWO	7514

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MINNEAPOLIS, MN 55402-0903

EXAMINER
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NGHIEM, MICHAEL P

ART UNIT	PAPER NUMBER
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2863

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/22/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/533,270

Applicant(s)

CARTER, PETER JOHN

Examiner

Michael P. Nghiem

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-16, 18, 19, 28, 29, 36, 38, 40 and 42 is/are rejected.
- 7) ☒ Claim(s) 9, 17, 20-27, 30-35, 37, 39, 41 and 43 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 11-3-06, 3-7-06, 4-28-05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

The preliminary amendment filed on April 28, 2005 has been acknowledged.

### ***Information Disclosure Statement***

The information disclosure statements filed on April 28, 2005 and March 7, 2006 fail to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because some of the listed references do not have publication dates (see attached IDS's). It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

### ***Specification***

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology

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often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The Abstract contains more than 150 words.

The disclosure is objected to because of the following informalities:

- "The settling tank 20" (page 9, line 10) should be -- The settling tank 18 --.
- "step 304" should be step -- 303 --.

Appropriate correction is required.

### ***Drawings***

The drawings are objected to because in Figs. 1 and 2, the strike-out lines through the labels "FIGURE 1" and "FIGURE 2" should be removed. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief

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description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claims 5, 13, and 42 are objected to because of the following informalities:

- claims 5 and 13, "SMS" (line 2) is not defined.
- claim 42, "the processor" (line 7) lacks antecedent basis.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1-8, 10-16, 18, 28, 36, 38, and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Clark et al. (US 2002/0035403).

Regarding claims 1, 10, 18, 28, 36, 38, and 40, Clark et al. discloses a monitoring method and system (50) for monitoring a fluid at a site (Fig. 1) (Abstract, lines 1-2), comprising:

- at least one sensor (72, 74) for monitoring the fluid and providing data indicative of a characteristic of the fluid (Fig. 1);

- a processor (60) associated with the site for receiving the data from the sensor (Fig. 1) and for storing the data in a storage (paragraph 0027, lines 9-11), the processor being programmed with predetermined rules (algorithm, paragraph 0032, line 3) and being for applying the predetermined rules to determine if the data, and therefore the characteristic of the fluid, meets a predetermined criterion (paragraph 0032, lines 2-4), and being for determining whether the data needs to be transmitted to a centralised control station (100, paragraph 0031, lines 1-6);

- a communication device (102, 104, 106) for establishing a data transmission link between the processor and the centralised control station (Fig. 2) and for transmitting the data over the link so the data can be transmitted in bulk when the rules determine the data needs to be transmitted to the station (Fig. 2; paragraph 0031);

- a server (server of 100) and a data store (data store of 100) at the centralised control station (Fig. 2) for receiving and storing the data for utilisation by a user over the Internet (paragraph 0032, lines 12-16);

- an event indicator for providing an indication if the predetermined criterion is not met so remedial action can be taken (paragraph 0032, lines 16-20).

Regarding claims 2 and 11, Clark et al. discloses an alarm at the site which is activated under control of the processor if the predetermined criteria is not met (paragraph 0032, lines 1-6).

Regarding claims 3 and 12, Clark et al. discloses that the processor is also for, in the event of determining that the characteristic of the fluid does not meet a predetermined criterion, transmitting data via the link to the centralised control station (paragraph 0031, lines 1-6), and the event indicator also comprising a communication processor (processor of 100) at the centralised control station for transmitting a message to an authorised person that the predetermined criterion has not been met (paragraph 0032, lines 16-20).

Regarding claim 4, Clark et al. discloses that the event indicator comprises an audible alarm (paragraph 0031, line 6) which is activated to indicate that the characteristic falls outside the predetermined criterion (paragraph 00932, lines 2-6).

Regarding claims 5 and 13, Clark et al. discloses a mobile telephone message forwarded to a mobile telephone of the person or an SMS message forwarded to the mobile telephone, or an e-mail message (email, paragraph 0032, line 5).

Regarding claims 6 and 14, Clark et al. discloses the communication link comprises a mobile telephone data communication link (paragraph 0015, line 3).

Regarding claims 7 and 15, Clark et al. discloses a plurality of sensors are provided for monitoring the fluid and providing a plurality of signals indicative of different characteristics of the fluid (paragraph 0006, lines 2-6).

Regarding claims 8 and 16, Clark et al. discloses the fluid comprises water within a cooling system of an air conditioning plant (cooling towers, paragraph 0024, line 6).

Regarding claims 18 and 28, even though Clark et al. does not disclose a collection tank, mixing tank, and pump, the recitation of the collection tank, mixing tank, and pump has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

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Regarding claims 18 and 28, Clark et al. further discloses a sensor for measuring the pH level (pH sensor 72) of the waste water in the settling tank (pool, Abstract, line 1), and for providing data indicative of the pH level (Fig. 1); applying the predetermined rules to determine if the data, and therefore the pH level (pH level, paragraph 0032, line 8), meets a predetermined criterion (paragraph 0032, lines 2-8); an event indicator for providing an indication if the pH level does not meet the predetermined criterion so remedial action can be taken (paragraph 0032, lines 16-20).

Regarding claims 36 and 38, Clark et al. further discloses a monitoring system for cooling towers (paragraph 0024, line 6) of an air conditioning system comprising a sensor for measuring the temperature of the water in the cooling tower (TEMP sensor 72) and providing data indicative of the temperature (Fig. 1); a sensor for measuring the conductivity of the water in the cooling tower (paragraph 0027, lines 21-22), and providing data indicative of the conductivity (paragraph 0027, line 22).

Claim 42 is rejected under 35 U.S.C. 102(b) as being anticipated by Okamoto (US 2002/0029575).

Regarding claim 42, Okamoto discloses a method of monitoring a refrigeration unit (paragraph 0002, lines 1-3), the method comprising:

- sensing air temperature within the unit and providing data indicative of the air temperature (paragraph 0004, lines 2-3; paragraph 0011, lines 4-6);

- storing and processing at the unit the data in accordance with predetermined rules to determine if the data, and therefore the air temperature, meets a predetermined criterion, and for determining whether the data needs to be transmitted to a centralised control station (5) (paragraph 0038, lines 2-8);

- establishing a data transmission link between the processor (processor of 1) and the centralised control station (Fig. 1) and transmitting the data over the link so the data is transmitted in bulk when rules determine the data needs to be transmitted to the station (paragraph 0038, lines 5-8);

- receiving the transmitted data by a server (server of 5) and a data store at the centralised control station (data store of 5) for so the data can be utilised by a user (paragraph 0039, lines 9-12) via the Internet (paragraph 0038, lines 6-7);

- providing an event indication if the criteria is not met so remedial action can be taken (paragraph 0039, lines 9-12).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 19 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al. in view of Wolfe et al. (US 2002/0077777).

Clark et al. discloses all the claimed limitations as discussed above.

Clark et al. further discloses a sensor (pump sensor 74) for sensing flow from the pump and providing data indicative of flow from the pump (Fig. 1).

However, Clark et al. does not disclose a sensor for measuring the water level in the settling tank and for providing data indicative of the water level.

Nevertheless, Wolfe et al. discloses monitoring the operating performance parameters of water treatment process (Abstract, lines 1-2) including water level (tank level, paragraph 0027, line 9) for the purpose of monitoring plant performance (paragraph 0027, lines 3-6).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide Clark et al. with monitoring the water level as disclosed by Wolfe et al. for the purpose of monitoring plant performance.

***Allowable Subject Matter***

Claims 9, 17, 20-27, 30-35, 37, 39, 41, and 43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in

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independent form including all of the limitations of the base claim and any intervening claims.

### ***Reasons For Allowance***

The **combination** as claimed wherein the programmed rules provide that data is transmitted in bulk when the storage is 80% full (claims 9, 17, 27, 37, 39, 41, 43) or a reservoir for providing an acid solution to the mixing tank; a reservoir for providing an alkaline solution to the mixing tank; respective sensors for measuring the level of the solutions in the acid reservoir and alkaline reservoir (claims 20, 30) or a first sensor for measuring the pH level in the mixing tank and a second sensor for measuring the pH level in the settling tank (claim 21) or the processor controls the pump to activate the pump to pump waste water from the settling tank when the water level in the settling tank reaches a predetermined level (claims 22, 31) or the event indicator provides an indication of the need to turn on or off the pump, replenish the acid solution or alkaline solution in the acid reservoir and alkaline reservoir (claim 35) is not disclosed, suggested, or made obvious by the prior art of record.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (571) 272-

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2277. The examiner can normally be reached on M-H.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MICHAEL NGHIEM  
PRIMARY EXAMINER

Michael Nghiem

February 20, 2007